54. On Additions to the Snake Fauna of Egypt. By Major S. S. FLOWER, O.B.E., F.L.S., F.Z.S. [Received August 31, 1923: Read November 6, 1923.]

- 1. Summary.—Snakes of the genera Typhlops and Lycophidium are recorded for the first time from Egypt, remarks are made on the status of Lycophidium abyssinicus, and the Proteroglyph Snake Walterinnesia agyptia is for the first time definitely proved to be an inhabitant of Egypt.
- 2. Acknowledgements.—I am indebted to Dr. Walter Francis Innes Bey, formerly Curator of the Zoological Museum, School of Medicine, Cairo, to Prof. Edward Hindle, F.L.S., F.Z.S., Biological Department, School of Medicine, Cairo, and to Mr. Michael J. Nicoll, F.Z.S., Assistant Director, Egyptian Government Zoological Service, for kindly giving me many opportunities of examining Egyptian snakes.

I wish also to express my thanks to Miss J. B. Procter, F.L.S., F.Z.S., for her kindness in looking up, and allowing me to examine, certain snakes in the collection under her charge in the

British Museum.

3. Typhlops.

When Mr. Boulenger published his "List of the Snakes of North Africa," P. Z. S. 1919, p. 299 et seq., no representatives of the family Typhlopidæ were known from Egypt.

Among snakes lent to me for examination in April 1923 were

two individuals of the genus Typhlops.

1st. A spirit specimen definitely proves that Typhlops occurs in Egypt. The discovery is due to Dr. Innes, who caught the snake himself on 6th March, 1906, among the roots of a tamarisk tree at Marg, on the eastern outskirts of Cairo.

The dimensions of this specimen in spirit, 17th April, 1923,

were:

	mm.	per cent.	Remarks.
Length, snout to vent		100	Scales in 22 or 24 rows.
" tail	$\begin{array}{c} 4 \\ 271 \end{array}$	1·49 101·49	Tail ends in a sharp point.
Diameter of body tail, at vent	5 5	1.87 1.87	Goes 54 times in total length.
Head { longth of shielded portion, in median line	4	1.49	
" total length	7 (?)	2.62(5)	
" width	4.2	1.68	
,, depth	4	1.49	
			FO#

This individual appears to me referable to the *Typhlops vermicularis* of Mr. Boulenger's British Museum Catalogue of Snakes,

and so extends the range of that well-known species.

2nd. On the 15th of April, 1923, Prof. Hindle sent me a live snake which he had purchased in Cairo from an Arab vendor of reptiles. The Arab said the snake came from Damietta. This may or may not have been so. As Damietta is a seaport its trade with other parts of the Mediterranean and the local habit of careening sailing craft on the shore make it possible for a snake found there to have been brought, by accident, with cargo or ballast from almost anywhere. Seaports are not "good localities" for recording reptiles from.

As far as I could examine this live individual it was also a specimen of *Typhlops vermicularis*, but it was of most unusual size for that species, being about 383 mm. in total length. The diameter of body was 7 mm. (i. e., goes about 53 times in total

length).

4. Lycophidium.

In "A List of the Snakes of North-East Africa" by Mr. Boulenger, P. Z. S. 1915, p. 646, two species of *Lycophidium* are mentioned:—

Lycophidium capense from "Tropical and South Africa."

Lycophidium abyssinicus from "Abyssinia."

In "A List of the Snakes of North Africa" by the same author, P. Z. S. 1919, the genus Lycophidium is not mentioned.

5. Lycophidium abyssinicus Boulenger, Brit. Mus. Cat. Snakes, i. p. 342, appears to be known only from the type-specimen in the British Museum, and to differ from L. capense only in having the rostral shield narrowed, almost pointed, behind. On examining the type in London, July 17, 1923, it appears to be inseparable from L. capense. Two females of L. capense from the Blue Nile have their rostral shields pointed.

6. Lycophidium capense.

When Mr. Boulenger wrote the Catalogue of Snakes there were no specimens of *L. capense* from North-East Africa in the British Museum, and so the single individual *Lycophidium* from Abyssinia was separated by a very wide tract of country from the known range of *L. capense*.

In July 1923 in the British Museum there were four specimens from North-East Africa entered in the catalogue in manuscript

by Mr. Boulenger, under:-

Lycophidium capense, var. B.

Female. V. 188. C. 31. Roseires, Blue Nile. S. S. Flower. 1909.

Female. V. 191. C. 40. Deesa, ,, ,,

Male. V. 166. C. 35. Onaramalka, Abyssinia. G. A. F. Abercromby. 1916.

Female. V. 180. C. 33. ", ",

These four specimens have all subcaudal shields paired,

7. An Egyptian Lycophidium.

Dr. Innes told me that he had in spirit a supposed young individual of Walterinnesia agyptia, collected in agricultural land in the Fayûm, Upper Egypt, in 1904, by the Rev. Father Teillard, and that there was no doubt whatsoever as to the locality. In answer to my enquiries Dr. Innes told me that Father Teillard had never collected in the Sudan, but had, from Cairo, gone to stay at a farm in the Fayûm, and while there came across this snake and brought it back with him for Dr. Innes's collection.

On 19th April, 1923, Dr. Innes lent me this specimen for identification. For fear of damaging it, I did not examine the teeth, but externally there appears no reason not to consider it a Lycophidium capense.

Scales 17 rows. Ventrals circa 196. Subcaudals 39: these subcaudals consist of three pairs at base, then three undivided

scales, then thirty-two pairs.

It was on the strength of these undivided subcaudals that the

snake had been referred to Walterinnesia.

It is a most remarkable fact that this South and Tropical African snake should occur in the Fayûm, but a parallel case appears to exist in the Rough-keeled, or Egg-eating, Snake Dasypeltis scabra, of which the late Dr. John Anderson recorded a single specimen from the Fayûm.

8. Walterinnesia ægyptia Lataste, 1887.

Dr. Innes discovered this species: he saw a snake in the hands of a native "snake-charmer" in Cairo, and recognizing that it was something different from the ordinary Cobras of the genus *Naia*, purchased the specimen and sent it to France to Monsieur Fernand Lataste.

On 7th February, 1887, this snake was described as a new genus and species by M. Lataste ('Le Naturaliste,' Paris, 1887, p. 411 et seq.), the generic name being in honour of the discoverer.

9. "Habitat" of Walterinnesia.

As the type-specimen was purchased by Dr. Innes from a professional "snake-charmer" in Cairo, it was in itself no evidence of being of Egyptian origin. A trade in live reptiles between the resident and wandering performers in Asia and North Africa exists, and probably has existed for many centuries.

Subsequently Dr. Innes purchased two more individuals from the same man. So three specimens of *Walterinnesia* appear to have been known when Dr. John Anderson wrote on the herpetology of Egypt, but Dr. Anderson does not mention the

number.

Dr. Anderson wrote ('Zoology of Egypt,' Reptilia, 1898, p. 325): "The only specimens on record of this species were purchased by Dr. Walter Innes from a snake-charmer in Cairo,

and there is nothing to fall back upon, beyond the statement of the juggler, to establish it (Walterinnesia) as an Egyptian species. I have made the most careful enquiries about its presence in the neighbourhood of Cairo, without having been able to throw any light upon the subject, and Dr. Innes's endeavours to procure more specimens have been fruitless."

Since Dr. Anderson's time several other visitors to Egypt, interested in Zoology, have made special endeavours to obtain

specimens of Walterinnesia, but without success.

On 12th November, 1908, the man who had sold the first specimens to Dr. Innes brought to Giza a live Walterinnesia, which I purchased for the Giza Zoological Gardens. This man said that this species of snake was not found in Egypt, and could only be obtained near the river Atbara, in the Berber Province of the Sudan. This statement was probably made to enhance the value of the specimen he offered to sell, but it influenced me at the time. I informed Mr. Boulenger, and in G. Z. G. "List of Animals (2nd edition)," 1910, p. 328, wrote of this species "Habitat probably Upper Nubia." So Mr. Boulenger, P. Z. S. 1915, p. 656, gave the distribution of Walterinnesia ægyptia as "Nubia? Egypt?" and, P. Z. S. 1919, p. 306:—"Egypt? Nubia?"

Meanwhile, in 1904, Dr. Innes had received from the Fayûm a black snake supposed to be an immature Walterinnesia. In April 1923 I had an opportunity of seeing this specimen, and, as mentioned above, it belongs to a very different genus.

10. Rediscovery of Walterinnesia.

On 5th April, 1923, Mr. M. J. Nicoll shot a black snake about 21 miles east of Cairo, on the Cairo-Suez road, which he handed over to me the same day for examination. It is the fifth individual of Walterinnesia agyptia of which we have record, and of great importance as being the first specimen obtained with reliable data as to locality, etc. It proves that M. Lataste was not in error when he gave the specific name agyptia. Mr. Nicoll's find also brings to notice the interesting fact that Walterinnesia is found in the desert, far from water, in the same kind of country where the Vipers of the genera Cerastes and Echis occur.

The only Proteroglyph Snakes, besides Walteriunesia, which are known from Egypt are two species of Cobra, Naia haie and Naia nigricollis, neither of which, as far as my present experience goes, are ever found more than about half a mile's distance from permanent water.

- 11. Known specimens of Walterinnesia.
- (i.) The type. Female. Described by Lataste. Now in British Museum.
- (ii.) Male. Described by Boulenger (Cat. Snakes, iii. p. 392) and by Anderson (1898, pp. 324, 325). Now in British Museum.

(iii.) Obtained by Dr. Innes (as were Nos. i. and ii.). Was in the Cairo School of Medicine Museum, now in the Giza Zoological Museum.

(iv.) Obtained alive (v. sup.) November 12, 1908, lived in Giza Zoological Gardens for eight months nineteen days.

Male. Now in the British Museum.

(v.) Male. Collected by Mr. M. J. Nicoll, April 5, 1923, on desert, about 21 miles east of Cairo. Now in Giza Zoological Museum.

 Notes on 5th specimen of Walterinnesia ægyptia, by S. S. F., April 5, 1923.

Male. Collected to-day by Mr. Nicoll.

General impression:—A heavily built, short-tailed snake, with a large flattish head, a small black eye, and a conspicuously large nostril.

Colour:—Upper surfaces shiny black; lower surfaces grey. Ventrals 190. Anals 2. Subcaudals 51 (actually 51 right, 50 left. First, at base, divided. Second to sixth entire. Seventh divided. Eighth entire. Remaining forty-two divided, and one extra half on right side).

	mm.	per cent.	Remarks.
Length, snont to vent	843	100	
" tail	143	16.9	Tail ends in a sharp point.
" total	986	116.9	
Diameter (greatest), body	c.23	c. 2.72	
Head { length of shielded portion, in median line	24	2.84	Head-shields agree with description by Mr. Boulenger, Cat. Snakes, iii. p. 392.
" total length	32	3.49	
" width	23	2.72	
" depth	13	1.54	

Number of scales round body:—

At about 5th ventral circa 29

,, 20th ,, 21

,, 25th ,, 21

"	20011	"	
"	$25 ext{th}$,,	21
	50th		23
"	75th	"	23
"		"	23
"	100th	"	
,,	125th	,,	21
,,	150th	"	19
••	175th		17